



Larry Hogan | Governor
Boyd Rutherford | Lt. Governor
R. Michael Gill | Secretary of Commerce
Signe Pringle | Deputy Secretary of Commerce

Transforming Manufacturing Workgroup
March 14, 2022, 10:00-12:00pm
Meeting Minutes

Workgroup Members in Attendance:

- Delegate Lily Qi, Chair
- Senator Chris West
- Todd Sabin, Maryland Commerce
- Erin Roth, Maryland Labor
- Lance Schine, Maryland DOIT
- Mike Galiazzo, RMI
- Lindsay Ryan, USM
- Suzy Ganz, MMAB
- Kelly Koerner, MACC
- Chris Cosgrove, RAMP MD
- Mike Kelleher, Maryland MEP
- Adam Porter, Fraunhofer USA
- Ken Sanchez, Chesapeake Specialty Products
- Jack Weber, Uptown Press
- April Richardson, Food Opportunity
- Irnande Altema, MICUA
- Bob Mather, Stanley Black & Decker

Staff:

- Michael Siers, Maryland Commerce
- Richard Clinch, Jacob France Institute

Public:

- Katie Hardy, Office of Delegate Qi
- Raymond Wang
- Matt Bohle

Welcome and Approval of Minutes

Delegate Qi welcomed all members to the meeting and asked for a motion to approve the minutes. Erin Roth made the initial motion which was seconded by Jack Weber. The minutes were approved unanimously.

Updates

• **Legislative Updates**

Delegate Qi gave updates on two pieces of legislation relating to the Workgroup. Delegate Qi first discussed SB 693/HB 841 and noted that Senator West was withdrawing the bill. Delegate Qi stated she had spoken with the House Ways and Means Committee as well and that the depreciation schedule is already in place. Senator West said it came as a surprise. Senator West mentioned that the initial \$30 million cost from the fiscal note came about as an error on the part of DLS. DLS drafted the bill for all

Maryland companies and not just manufacturers. After correcting this, representatives from the Comptroller's Office indicated that the bill was not necessary because it was already in statute. The Comptroller's Office said that this measure was passed as part of the More Jobs for Marylanders (MJM) program and that for the past two years Maryland manufacturers can depreciate up to one million dollars in year one. However, Senator West noted that the Comptroller's Office said no companies have taken advantage of the measure in part because accounting software has not yet been updated to incorporate this change. Senator West said one open question that remains is if a manufacturer bought an item in the past two years if they can amend their returns to take advantage of this new depreciation schedule. Senator West asked if someone from Commerce could look into this and Michael Siers said that he would. Delegate Qi said that without the workgroup no one would know about this. Ken Sanchez noted that he did not see the text of this after searching and asked that the law be forwarded to him so that he could show it to his accountants. Jack Weber said the one million dollar figure is the same as the federal rate and that likely businesses would need a letter from the Comptroller if it is just an interpretation by that office of the current law rather than something within COMAR. Mike Galiazzo agreed that it was difficult to find an explanation of what was going on since the language was buried within the MJM legislation. Delegate Qi noted that she wanted to make sure this language was codified for the next governor.

Next, Delegate Qi discussed HB 1384. Delegate Qi thanked all members of the workgroup for testifying and stated that everyone did a great job sharing individual experiences while also reinforcing the broader message. Delegate Qi noted that the testimony had been well received and that hopefully the program can align with Commerce's M3 pilot program.

- **Review of Stanley Black and Decker Manufactory Tour**

Bob Mather recapped a virtual tour of Stanley Black and Decker's Manufactory in Connecticut. Mr. Mather noted that more than 100 people attended the tour. The Manufactory showcases various advanced manufacturing technologies and how they can be used in factories and warehouses. For example, Mr. Mather noted that the tour highlighted the "first in the world" production wood 3D printer. Mr. Mather also commented on lessons learned from the state of Connecticut. Connecticut had a large manufacturing base and while the sector has declined significantly, there are still over 150,000 jobs in nearly 4,000 businesses in the state. Mr. Mather noted that Connecticut takes manufacturing seriously and has the nation's only "Chief Manufacturing Officer." Mike Galiazzo commented that one thing from the tour that caught his eye was the mention of \$100 million to support manufacturing in Connecticut. Bob Mather noted that Downtown Hartford had seen an exodus of factories and major manufacturing employers and that this money is an exciting opportunity to start revitalizing the area. Delegate Qi commented that having a Chief Manufacturing Officer was a strong statement and she thought that could be a future recommendation of the workgroup. Susie Ganz noted that Maryland and Connecticut seem fairly similar in terms of size and structure and she wondered what lessons there were for Maryland in Connecticut's experience. Richard Clinch said that for next meeting he could prepare a comparison and present it to the group. Delegate Qi agreed that that research would be of interest.

Presentation by Greenland Technologies

Delegate Qi noted that Greenland Technologies is a new global company to Maryland and that the Department of Commerce worked to attract Greenland to locate in the state. Delegate Qi welcomed Raymond Wang, the CEO of Greenland Technologies to the workgroup and asked him to give an overview of his company. Mr. Wang thanked the workgroup for their time. Mr. Wang noted that Greenland Technologies is comprised of two components: Zhongchai Machinery (which is a market leader in the design, manufacture, and distribution of drivetrains for vehicles such as forklifts) and Greenland Machinery (which manufactures electric industrial vehicles), founded in 2019 to build off the experience of Zhongchai Machinery. Mr. Wang gave an overview of the company's history and initial electric vehicle offerings. Additionally, Mr. Wang noted how Greenland Technologies fit into the broader market for forklifts, front loaders, and excavators, as well as the benefits of using electric vehicles in those markets. For example, Mr. Wang noted that electric vehicles are much quieter than traditional combustion engines which is ideal in more sensitive areas such as near schools or parks. Mr. Wang also discussed how the new Maryland facility fit in with the company's other locations.

In 2022 Q2, Greenland Technologies will be opening an assembly facility in Maryland. Mr. Wang noted the company is close to finalizing the lease on a space and that when that happens, the company will be transporting components from the main manufacturing facility in China rather than fully constructed vehicles. Mr. Wang mentioned many of the positive attributes that brought the company to Maryland, including existing infrastructure, a strong sustainability commitment, a skilled workforce, and numerous partnership opportunities. Delegate Qi asked if Mr. Wang could disclose where the facility would be and Mr. Wang mentioned that the lease had yet to be signed. Delegate Qi asked Mr. Wang about the types of jobs Greenland Technologies was looking to create. Mr. Wang mentioned that the company was looking to hire several dozen direct jobs ranging from electrical engineers to administrative staff. Mr. Wang said that because Greenland Technologies uses one of the larger batteries on electric vehicles, one avenue the company is excited to explore is the possibility of finding in-state partners to move more of the supply chain into Maryland. Kelly Koermer noted that one thing community colleges have been working on in-state has been maintenance for electric vehicles. Ms. Koermer asked Mr. Wang if he could share what the maintenance needs were around their vehicles so that community colleges could better prepare students. Mr. Wang noted that electric vehicles share a number of similarities with traditional vehicles, especially the need for maintenance around hydraulic systems. Mr. Wang noted that that was one of the company's focuses from a service education standpoint. Additionally, Mr. Wang noted that the company looks for a general understanding of electrical components, which is necessary for worker safety. Delegate Qi thanked Mr. Wang for his presentation and time and noted that she hoped Maryland's companies and universities could partner with Greenland Technologies.

Upcoming Meeting Schedule and Topics/Update on Research Support

Delegate Qi noted that in order to produce a final report by December, the work group will likely need to have a decent product by October. Delegate Qi turned the discussion over to Michael Siers to review the current plan for the work group. Michael Siers walked through the nine tasks for the work group as set out in the statute. Mr. Siers noted which of these items had already been discussed and noted that Richard Clinch and his team had already worked on data for several pieces. Mr. Siers then discussed the draft work plan as laid out in the work group's interim report. Mike Galiazzo commented that, regarding workforce, the intent was that the industry needed to understand the technologies in detail to truly understand workforce needs. Mr. Galiazzo said the intent was not to focus on curriculum but that he believed most members of the work group would agree that an incremental approach was not what was needed. As the technology changes rapidly, curriculum needs to change as well. Mr. Galiazzo noted that Senator Rosapepe had made a similar point during an earlier meeting. Erin Roth agreed that a good approach would be to look at true short term need, long term needs, and then focus on workforce and look for gaps. Michael Siers asked that if members had suggestions for speakers or meeting topics that they be sent to him.

Susie Ganz asked if there were good metrics that the workgroup could use to look at Industry 4.0 and its importance. For example, if Maryland implements different policies, what does the state stand to gain? Susie asked if Richard Clinch could look into this. Mr. Clinch responded that there is not a lot that can be done on the regulation side but that his team could look at tax cuts, citing Connecticut as a state with a number of existing tax programs targeting manufacturing. Mr. Clinch suggested looking at what other states are doing in the regulatory framework (offering the Chief Manufacturing Officer in Connecticut and the Advanced Technology Council in Iowa as examples) and then attaching that to workforce. Mr. Clinch said he believed the timeline to look at workforce was good because it lined up with the release of QCEW annual data. Mike Galiazzo said he was concerned the framework in the interim report could be too rigid, asking what if the work group unearths information relating to Industry 4.0 adoption in September. Delegate Qi said that the work plan should remain fluid. Delegate Qi said the plan should address where Maryland currently is, including any shortcomings, and then provide an opportunity to identify where Maryland needs to go, for example by looking to best practices in other states. Delegate Qi indicated that it would be ideal to have the final report as a roadmap for the next governor, regardless of who that would be.

Susie Ganz said it would be interesting to know if there were similar states to Maryland and what the first three to five actions those states took were, what impacts those actions had, and what lessons Maryland can learn from that. Richard Clinch said that a lot of the programs are so new that they have not been evaluated yet and he would not be able to tell the workgroup with a high degree of certainty what the outcomes of many specific actions were. Delegate Qi said that at this stage a lot of Industry 4.0 adoption is very new and the current supply chain crisis could accelerate this. Delegate Qi

said she believed many states will be implementing programs similar to what Maryland is considering in the coming months and years. Delegate Qi asked Richard Clinch if he believed the work plan should be tweaked and asked him what help he needs from work group members to conduct his research. Mr. Clinch said that information on the regulatory environment was his number one need and given the limited formal evaluations mentioned previously, the ability to get anecdotes is about the best that can be done. Mr. Clinch suggested bringing in some of what he has been finding to the next two meetings and then talking about next steps.

Ken Sanchez asked how we get small and medium sized businesses to adopt the technology, noting that as a small business owner he was struggling with this as well. Mr. Sanchez suggested that having real world data on output changes at companies using this technology could help. Mr. Sanchez asked Susie Ganz if she had additional ideas since her company has experience with Industry 4.0 adoption. Susie Ganz said that Industry 4.0 adoption has been a long and challenging haul and the question on how businesses can adopt the technologies could be an excellent meeting topic. Ms. Ganz noted that Industry 4.0 adoption is expensive and requires a lot of resources and suggested companies start small. Ms. Ganz noted that there is a lot Maryland can do to help companies with derisking. Richard Clinch asked if it would be helpful for him to do a case study on Susie or someone else to talk about their experiences. Delegate Qi said that would be helpful for policy makers. Mike Galiazzo suggested Richard work with Stanley Black and Decker because, while not a small company, they are comprised of smaller groups and therefore may have useful knowledge. Richard Clinch suggested also talking with businesses that failed to adopt Industry 4.0 technology to gain a better understanding of barriers. Mike Galiazzo noted that Industry 4.0 is not just about changing technology, but a change in a company's mindset and culture. Ken Sanchez pointed to the biotech industry's success in Maryland and asked what the work group can do to get more support from state agencies, universities, and other partners. Delegate Qi asked Richard Clinch if he believed the work plan from the interim report could be changed. Mr. Clinch indicated that it could be. Susie Ganz suggested that Richard Clinch consider anecdotally what other states started with small and medium enterprises and what actions helped those businesses specifically. Mr. Clinch said he was not sure if any other state had laid out a specific plan for SMEs and said that best practices have largely relied on a combination of financial and technical support to MEPS. Delegate Qi suggested that in the next week or so the work plan should be revised to help guide Richard's work. Delegate Qi noted that at a high level the group should consider 'what is the problem we want to solve' and then focus on barriers and solutions/best practices from there.

Future Meeting Dates:

Michael Siers noted that the next meeting was scheduled for Tuesday April 19th from 10 AM to noon and asked if workgroup members would prefer Tuesdays or Mondays moving forward. Workgroup members noted that Mondays generally were preferable and workgroup members agreed to move the next meeting to Monday, April 18th at 10 AM. Afterwards, Delegate Qi adjourned the meeting.